

Work Order ID 162599***162599***

Page 1

Monday, June 05, 2017 9:42:49 AM

Item ID: D412-761-047

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Instrument Panel

Start Date: 6/9/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/15/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: DAS Date: JUN 07 2017 Tooling: _____ Date: _____Run Start ***NR1***QC: 21 Date: _____ SPC (Y/N): _____ Date: _____Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
IIN D412-761	G

DAS
6
9-89

JUN 21 2017

100	Document Control	0.00
100	DOCUMENT CONTROL	
DC	Memo	0.00
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-761-047 CHG002	

DAS
27
9-89

JUN 28 2017

110	Pick Kit	0.00
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110		
Packaging	Memo	0.00

Packaging

JUN 26 2017

DAS
6DAS
28

120	QC4- 100% Inspect kits for completeness	0.00
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120		
QC	Memo	0.00

Quality Control

DAS
27
9-89

JUN 28 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER :			
Misidentified ☐	☐	Past Due	☐				

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Page 1

162599

D412-761-047

Required Date: 6/15/2017

Required Qty: 1.00

Comments: IPP Rev:A 09-01-13 rev.C as per dwg DD verified by:EC IPP Rev:B
13.01.15 as per ECN13-511 DD Verf:JLM IPP Rev:C 16.06.21 PER
IIN REV.F DD Verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3705-041		Manufactured	No			110	Each	1.0000	1	1			
DAS 27 9-89 *D3705-041* Instrument Paney Assembly													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				ST381			1						
				159063			1						
D3705-7		Manufactured	No			110	Each	8.0000	1	1			
DAS 27 9-89 *D3705-7* Main Panel													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				st507			8						
				146199			8						
D3705-9		Manufactured	No			110	Each	6.0000	1	1			
DAS 27 9-89 *D3705-9* Panel													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				st507			6						
				146203			6						
D3705-11		Manufactured	No			110	Each	7.0000	1	1			
DAS 27 9-89 *D3705-11* Main Panel													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				st507			7						
				146202			7						

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date: _____	Step #: _____	QTY Effective: _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Page 2

Work Order ID: 162599

162599

Parent Item: D412-761-047

D412-761-047

Parent Item Name: Instrument Panel

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 1.00

Required Qty: 1.00

D3707-1
D3707-1
Mounting Lug

DAS
27
9-89

Manufactured No

110 Each

2.0000

**

DAS
6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST050

2

149521

2

D3790-1
D3790-1
Indexing Block

DAS
27
9-89

Manufactured No

110 Each

8.0000

**

DAS
6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST052

8

146200

8

D3867-1
D3867-1
Connector Plate

DAS
27
9-89

Manufactured No

110 Each

17.0000

**

DAS
6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST053

17

143648

17

D4758-1
D4758-1
Blanking Plate

DAS
27
9-89

Manufactured No

110 Each

21.0000

**

DAS
6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST123

21

146209

21

D4758-3
D4758-3
Blanking Plate

DAS
27
9-89

Manufactured No

110 Each

16.0000

**

DAS
6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST123

16

146204

16

Monday, June 05, 2017 9:42:47 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

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Page 3

Work Order ID: 162599

162599

Parent Item: D412-761-047

D412-761-047

Parent Item Name: Instrument Panel

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-4A Purchased No

110 Each

361.0000

4

4

DAS

AN3-4A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

ST350

361

m137478

361

110

Each

304.0000

6

6

DAS

6

9-89

JUN 26 2017

DAS
28

AN526C1032R6 Purchased No

110 Each

304.0000

6

6

DAS

6

9-89

JUN 26 2017

DAS
28

AN526C1032R6

Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

ST326

304

1892

304

110

Each

8.0000

2

2

DAS

6

9-89

JUN 26 2017

DAS
28

AN743-12 Purchased No

110 Each

8.0000

2

2

DAS

6

9-89

AN743-12

Clip

DAS
27
9-89

Location

Loc Qty

Loc Code

ST330

8

M127124

8

110

Each

4.0000

6

6

DAS

6

9-89

JUN 26 2017

DAS
28

MS21075L3 MS21075L3N Purchased No

110 Each

4.0000

6

6

DAS

6

9-89

JUN 26 2017

DAS
28

MS21075L3

Nut Plate

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

1

m135774

1

ST298

3

m135908

3

137460

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Page 4

Work Order ID: 162599

162599

Parent Item: D412-761-047

D412-761-047

Parent Item Name: Instrument Panel

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 1.00

Required Qty: 1.00

MS24693-C272

Purchased

No

110

Each

976.0000

4

4

DAS
6
9-89

MS24693-C272

Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

OVER010

519

17831

519

ST287

457

17137

457

110

Each

144.0000

**

1

DAS
6
9-89

MS27039-1-17

Purchased

No

MS27039-1-17

Screw (601.1954)

DAS
27
9-89

Location

Loc Qty

Loc Code

ST280

144

m127831

144

110

Each

29.0000

**

1

DAS
6
9-89

MS27039-1-27

Purchased

No

MS27039-1-27

Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

ST279

29

110606

29

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval ☐	
Description Work Order Deviation		Disposition			
				Completed By _____	
				Lead hand / Supervisor Approval Verification ☐	
				QC / QA Coordinator Approval ☐	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Monday, June 05, 2017 9:42:47 AM

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Work Order ID: 162599

Parent Item: D412-761-047

Parent Item Name: Instrument Panel

162599

D412-761-047

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

110

Each

2,025.000

4

MS21042L3

Nut

**

DAS

6

9-89

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

FP001

79

m135945

79

GA

434

m134360

102

M136665

332

OVER007

1000

m134360

0

m137680

1000

ST303

512

m137321

4

m137495

508

4

MS21919-WDG8

Purchased

No

110

Each

44.0000

2

MS21919-WDG8

Clamp

**

DAS

6

9-89

JUN 26 2017

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

over008

25

m137320

25

ST293

19

m136537

19

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			

Picklist Print

Monday, June 05, 2017 9:42:47 AM

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Work Order ID: 162599

162599

Parent Item: D412-761-047

D412-761-047

Parent Item Name: Instrument Panel

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0332J

Purchased

No

110

Each

791.0000

10

10

NAS1149D0332.J

Washer

**

DAS

6

9-89

JUN 28 2017

DAS

28

9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP

225

m136015

8

m137075

217

GA

308

m136643

308

ST264

258

m136015

0

m137412

258

137136

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER :			

162599

Monday, June 05, 2017 9:42:49 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 6/9/2017 **Start Qty:** 1.00 ***1***

Required Date: 6/15/2017 **Req'd Qty:** 1.00 *** 1 ***

Reference:

Approvals: Process Plan: _____ Date: JUN 07 2017 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Draw Nbr	Revision Nbr	JUN 21 2017
IIN D412-761	G	

100	Document Control	0.00	DAS	JUN 22 2017
100	DOCUMENT CONTROL		5	
DC	Memo	0.00	9-89	
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-761-047	CHG002		

110	Pick Kit	0.00	
110			
Packaging	Memo	0.00	
Packaging			

120	QC4- 100% Inspect kits for completeness	0.00	
120			
QC	Memo	0.00	
Quality Control!			



Department of Transport

Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: SH09-4

Issue No.: 3

Approval Date: February 03, 2009

Issue Date: June 15, 2016

Responsible Office:

Prairie and Northern

Aircraft/Engine Type or Model:

Bell 204B, 205A, 205A-1, 205B, 212, 214B, 214B-1, 412, 412 CF, 412 EP

Canadian Type Certificate or Equivalent:

H-104 (Bell 205B)
H-80 (Bell 214B, 214B-1)
H-86 (Bell 212, 412, 412 CF, 412 EP)
H1SW (Bell 204B, 205A, 205A-1)

Description of Type Design Change:

Full Vertical Reference Door for Left Hand Vertical Reference Operations.

**Installation/Operating Data,
Required Equipment and Limitations:**

Configuration 1

(204B, 205A, 205A-1, 205B; 212 and 212 modified per SH07-28; 412, 412EP, 412CF; 214B, 214B-1);

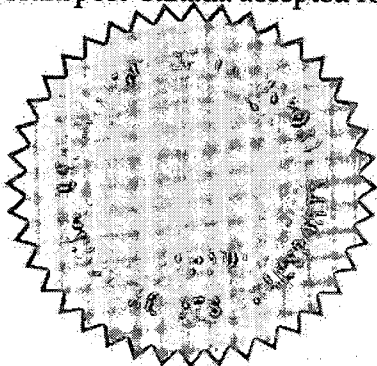
Full Vertical Reference Door Kits to be manufactured in accordance with Dart Aerospace Ltd. Master Document List MDL-D412-761 Rev. C dated January 29, 2009, or later Transport Canada approved revision.

Installation of Full Vertical Reference Door Kits to be in accordance with Dart Aerospace Ltd. Installation Instructions IIN-D412-761 Rev. C dated December 12, 2008, or later Transport Canada approved revision.

The Full Vertical Reference Door Kits must be maintained in accordance with Dart Aerospace Ltd. Instructions for Continued Airworthiness ICA-D412-761 Rev. 0, dated November 12, 2008, or later Transport Canada accepted revision.

See Continuation Sheet ...

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.



Loy Y. Liew
For Minister of Transport

Canada

(CONTINUED FROM PAGE 11)

QTY -041	QTY -041A	QTY -043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	QTY -141	PART NUMBER	DESCRIPTION
				1					D3705-041	INSTRUMENT PANEL ASSEMBLY
				1					D3705-043	* INSTRUMENT PANEL WELDMENT
				1					D3335-1	* SPRING
				1					D3705-5	* ACCESS PANEL
				1					D3706-041	* LOCK BRACKET ASSEMBLY
				1					D3706-5	* PIN
				2					D3707-3	* MOUNTING LUG
				2					AN3-3A	* BOLT
				4					AN526C1032R6	* SCREW
				1					MS171498	* SPRING SLOTTED PIN
				4					MS24693-C272	* SCREW (OR MS24693-S272)
				2					NAS1149D0332J	* WASHER (OR AN960JD10L)
				1					NAS1149D0563J	* WASHER (OR AN960JD516)
				1					D3705-7	FACE PLATE (MINIMUM REQUIRED INSTRUMENTS FOR 204, 205, 210, AND EAGLE SINGLE MODELS)
				1					D3705-9	FACE PLATE (MINIMUM REQUIRED AND OPTIONAL INSTRUMENTS FOR 204, 205, 210, AND EAGLE SINGLE MODELS)
				1					D3705-11	FACE PLATE (FOR 212, 214, 412, MODELS)
				2					D3707-1	MOUNTING LUG
				1					D3790-1	INDEXING BLOCK
				1					D3867-1	CONNECTOR PLATE
				2					D4758-1	BLANKING PLATE
				3					D4758-3	BLANKING PLATE
				4					AN3-4A	BOLT
				6					AN526C1032R6	SCREW
				2					AN743-12	BRACKET
				6					AN960JD10L	WASHER
				6					MS21075L3	NUTPLATE (OR MS21073-3)
				4					MS24693-C272	SCREW (OR MS24693-S272)
				1					MS27039-1-17	SCREW
				1					MS27039-1-27	SCREW
				4					MS21042L3	NUT
				2					MS21919WDG8	CLAMP
				4					NAS1149D0332J	WASHER (OR AN960JD10L)
					1	1			D3694-041	MOUNTING PLATE ASSEMBLY
					1	1			D3694-1	* KEYWAY
					1	1			D3694-3	* PROTECTIVE PLATE
					1	1			D3694-5	* MOUNTING PLATE
					1	1			AN526C1032R8	* SCREW
					4	4			MS21042L3	* NUT
					2	2			MS21209F1-20	* HELI-COIL, SCREW LOCKING (RED)
					1	1			MS24693-C271	* SCREW (OR MS24693-S271)
					4	4			MS24693-C273	* SCREW (OR MS24693-S273)
					5	5			NAS1149D0363J	* WASHER (OR AN960JD10)
					1	1			D3695-041	SLIDER ASSEMBLY
					1	1			D3695-1	* SLIDER
					1	1			D3695-3	* STOPPER
					1	1			MS21209F6-25	* HELI-COIL, SCREW LOCKING (RED)
					4	4			MS21209F1-20	* HELI-COIL, SCREW LOCKING (RED)
					4	4			MS24693-C276	* SCREW (OR MS24693-S276)
					1	1			D3801-1	* HAND RETRACTABLE SPRING PLUNGER

*DENOTES PART IS INCLUDED WITH ASSEMBLY ABOVE